

WHAT IS CLAIMED IS:

1 1. In a machine for making filters for attachment
2 to smokers' products, a mobile transfer device for
3 introduction of filter material for tobacco smoke into
4 sections of wrapping material; guide means for said
5 transfer device; and compensating means between said
6 transfer device and said guide means.

1 2. The structure of claim 1, wherein said guide
2 means comprises a groove for a portion of one of said
3 transfer device and said compensating means.

1 3. The structure of claim 2, wherein said compen-
2 sating means includes an elastic material.

1 4. The structure of claim 2, wherein said
2 transfer device includes at least one mobile plunger.

1 5. The structure of claim 4, wherein said
2 compensating means includes a tubular guide for said at
3 least one plunger.

1 6. The structure of claim 4, further comprising
2 means for limiting the extent of movability of said plun-
3 ger.

1 7. The structure of claim 1, wherein said compen-
2 sating means comprises at least one spring.

1 8. The structure of claim 1, wherein said
2 transfer device comprises at least one mobile plunger
3 and a motor for moving said plunger.

1 9. The structure of claim 8, wherein said motor
2 is a stepping motor.

1 10. The structure of claim 1, wherein said
2 transfer device comprises at least one mobile plunger
3 and means for monitoring the extent of movability of said
4 plunger.

1 11. The structure of claim 10, wherein said
2 monitoring means is selected from the group consisting
3 of power sensors, contact sensors and distance sensors.

1 12. The structure of claim 1, wherein said com-
2 pensating means includes elastic synthetic plastic
3 material.

1 13. The structure of claim 12, wherein said
2 elastic material is a foam.

1 14. The structure of claim 12, wherein at least
2 one of said transfer device and said guide means has at
3 least one chamber for said elastic material.

1 15. In a machine for making filters for attachment
2 to smokers' products, the combination of a mobile device
3 for introduction of filter material for tobacco smoke
4 into at least one section of a wrapping material; and
5 a control element constituting a means for facilitating
6 only indirect movements of said device.

1 16. The combination of claim 15, further
2 comprising a compensating element between said mobile
3 device and said control element.

1 17. A machine for making filters for smoke
2 generated by products of the tobacco processing industry,
3 comprising at least one mobile transfer device for the
4 introduction of quantities of tobacco smoke filtering
5 material into tubular receptacles; guide means for said
6 transfer device; and means for compensating for depar-
7 tures of quantities of filter material from predetermined
8 quantities.

1 18. In a machine for making composite filter
2 plugs for attachment to rod-shaped smokers' products,
3 the combination of:

4 means for advancing a succession of tubular
5 receptacles for filter material for tobacco smoke in a
6 predetermined direction along a predetermined path;

7 adjustable means for introducing discrete
8 quantities of filter material into successive receptacles
9 in said path;

10 means for monitoring said quantities of filter
11 material; and

12 means for adjusting said introducing means when
13 the monitored quantities depart from a predetermined
14 value.

1 19. The combination of claim 18, wherein said
2 introducing means is movable relative to successive
3 receptacles in a predetermined portion of said path and
4 the extent of movement of said introducing means is
5 indicative of the quantity of filter material introduced
6 into the receptacle then located in said portion of said
7 path, said monitoring means including means for
8 ascertaining the extent of movement of said introducing
9 means.

1 20. The combination of claim 18, further
2 comprising means for removing from said path those
3 receptacles wherein the quantity of filter material in
4 the receptacle occupying said portion of said path causes
5 the introducing means to move through a distance outside
6 of a predetermined range of distances.